Pines Dining Hall + Servery Addition

800 Centre Street, Burns Lake, B.C.

Northern Health Authority

Post Tender Addendum No. 1

Issued 29 June, 2018 Total (Excluding Cover Page): 17 Pages 9 Drawings

DGBK Project No. 17-110

PROJECT:

Northern Health Authority Pines Dining Hall + Servery Addition Burns Lake, BC

Project No. 17-110

CONSULTANT: DGBK Architects

This Addendum is to be read in conjunction with and considered as an integral part of the Contract Documents. Revisions supersede the information contained in previously issued Drawings, Specifications and Addenda. Request for Proposal submitted is to include all items of this Addendum. Consideration will not be allowed for any extras due to any Bidder not being familiar with the contents of this Addendum.

DRAWINGS: Full Size Drawings: A-104, A-200, A-501, A-502, A-601, A-603, S-100, S-200 & S-300 Sketches: None

ATTACHMENTS:Interior Finish Schedule (revised)3 PagesStructural Post Tender Addendum 11 PageElectrical Addendum #22 PagesPreliminary Geotechnical Report: Issue Date: 2018-05-179 Pages

SPECIFICATIONS:

Item 1 Division 9 Finishes Replace with revised:

Finishes Schedule: Revision 1 (2018-06-06)

DRAWINGS:

Item 2 Drawings: A-104, A-200, A-601 & A-603

Note revisions and clarifications:

- 1. Inclusion of proposed wording revisions by EXP (Building Envelop Consultant)
- 2. Clarification regarding thermally broken cladding support system components and sequencing.

DOCUMENTS & REPORTS:

Item 4 Preliminary Geotechnical Report (2018-05-17)

By GeoNorth Engineering Ltd.

End of Post Tender Addendum No. 1

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POST TENDER ADDENDUM 1

то:	DGBK Architects	DATE:	June 22, 2018
ATTENTION:	Peter Sickert	FROM:	Brett Halicki P.Eng.
PROJECT:	The Pines Dining Addition	PROJECT	7047
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This addendum forms part of the Contract Documents and is to be read, interpreted, and coordinated with all other parts. The cost of work contained herein is to be added to the contract sum. The specifications and drawings are complementary. Items listed under the specification in this addendum and having influence on the drawings are deemed to alter the drawings. Items listed in the drawings in this addendum and having influence on the specifications are deemed to alter the specification.

Drawings S-100

• Revise Geotechnical specification as noted.

Drawing S-200

- Add section 6 for typical door threshold transition complete with insulation and fill as shown.
- Add section 7 showing frost protection at exterior pad footing
- Add section 8 showing frost protection detail at exposed exterior wall
- Revise under slab on grade compacted gravel from 150 mm to 100 mm thick

Drawing S3-00

- Delete reference to perimeter drainage in sections 1 and 2
- Add section 6 to drawing
- Add section 7 to drawing
- Add section 8 to drawing

Attached: Drawing S-100, S-200, S-300

Regards,

Brett Halicki P.Eng.



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EXIST. STUD WALL FROVIDE FOAM GASKET BETWEEN NEW CONC. & EXIST. WOOD FRAMING		EXIST. FLOOR FRAMING	EXIST. 200 R/C FOUNDATION WALL BEYOND	EXIST. 200 R/C FOUNDATION WALL		AS PER SECTION 1 THIS SHEET
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SCHEDULE 38x SILL PLATES ON FOAM GASKET 130 SLAB ON GRADE, SEE PLAN FOR REINF.	•	LOCALLY THICKEN 5.0.G. 50mm AT PERIM. 0F EXIST. BUILDING. PROVIDE 10M x500 LG DOWLES C/W HILTI	HIT RE500, EMBED 100 to Match, Slab Reinf.	I5M DOWELS \$400	200 R/C WALL BEYOND	

FOR FOOTING SIZE -& REINF, SEE PLAN & SCHEDULE

S200





			DG	BK ARCHITECTS
Fini	thes Schedule			
Д.	nes Extended Care Faci	lity	ject No. 17-	-110
Ō	ning Room Addition	Iss	led for Tender 4/2	24/2018
Ø	ırns Lake, British Columbia.	Rev	ision No. Rev 1 Jui	ine 6,18
Ū	ENERAL NOTES REGARDIN	G FINISHES:		
	 Flooring- Ensure sub floor is smooth 	and clear before new flooring installed. Follow flooring manufact	ures installation guidelines.	
	Install new wood grain sheet flooring	in one consistent direction for all rooms. Flooring to be laid tight f	rom wall surface to wall surfa	ace to ensure
	edges are cover by wall base. Heat	weld all seams with matching welding rod colour. Ensure flush w	th adjacent floor surfaces.	
-	Base- Install rubber base to all wall	surfaces that are not flashcoved, including under and around milly	/ork.	
-	: Painting- Prime all walls with like col-	our to finished coat. Paint wallsurfaces behind wood panels.		
	Paint ceiling bulkheads, vaulted ceili	ng, all walls surfaces with Egg Shell low VOC paint. Paint metal c	oors and frames with Satin fi	finish paint for metal.
-	Acoustic tile ceiling- install new T-ba	grid and ceiling tiles as noted on plan and in schedule.		
-	Millwork cabinets- install millwork as	noted on drawings.		
	Ensure all exposed surfaces are finis	hed with High Pressure laminate. Interior of cabinets and shelve	s to be white melamine finish	
	All drawers and doors to have full ex	ension metal hardware with soft close. Such as Blum or Accurid	e slides.	
	Counter surfaces- Solid surface 20m	m thick material with 6" high backsplash.		
	All counter and back splash joints to	be fused for seamless installation.		
-	Install corner guards to outside corner	r surfaces as indicated. Fasteners to be hidden.		
_	I Install wall protection sheets with ver	tical seam only, use T mould at these seams. Install wall protect	on behind bumper rails,	
	hand rails and corner guards. Top of	wall protection sheets to receive J mound trim on expose edges.		
	Handrails and bumper rails to be use	d on lobby area walls together, as noted on plan.		
-	Wood wall paneling to be applied in	vertical boards. Any seams to be overlaped. Boards to be clear co	ated on site for sealed surfa	lce.
-	Wood ceiling treatment to be installe	d as per ceiling plan layout. Mounted over Black accoustic materi	al.	
	Boards to be sealed with clear coat 	rior to installation.		
	Roller shades to be mounted in all ev	terior window at ground level. Mount within the window header d	epth. Ensure controls are po	ositioned
	to not interver with door ways. Blind	s on doors are to be mounted on the door headrail with hold dowr	s at the bottom.	

6/6/2018

			DGBK ARCHITECTS
FINISH MA	ATERIALS AND COLC	DURS-	
CODE	MANUFACTURE	PRODUCT DISCRIPTION	LOCATION
ELOOR COV Rev 1 VT1	<u>/ERING</u> Erv Parent Group-	Johnsonite, Tarkett- Acczent wood grain, roll goods. Colour- 81102 French Oak, natural. 6'-6" wide x 76' rolls x .080" thick. Ensure all seams area heat welded with matching colour.	Vestibule, Lobby, Dining Hall and corridor to washrooms.
NS1	Erv Parent Group-	Altro Walkway 20- Sheet non-slip flooring. colour- Savannah VMI2050, Welding Rod 153. .08" thick, 6'-7" wide roll , 66' long or 2.0mm thick x 2M x 20M. Flashcove flooring up walls 6". Caulk to finished wall surface.	Kitchen, Pantry.
NS2	Erv Parent Group-	Johnsonite, Tarkett- Granit Safe T, sheet non-slip flooring. Colour- 691 Soft Fleece. Welding rod 1290036 .098" thick, 6'-6" wide x 82' roll or 2.5mm x 2M x 25M. Flashcover flooring up walls 6". Wall protection to align with top of base	Washrooms, Storage rooms
RUBBER BA RB1	SE Johnsonite	Johnsonite 6" high standard coved rubber base Colour- 09 Clay wall base.	Vestibule, Lobby, Dining Hall
ACOUSTIC (AT1	<mark>CEILING TILES</mark> CGC acoustical panel	Eclipse ClimaPlus #78575, 2' x 4' x 3/4". Class A, NRC .70. Grid profile A- Dx/DXL, Square edge tiles. white tiles and T grid.	Vestibule, Lobby.
SOLID SURF SS1	- ACE Caesarstone	20mm, (3/4") thick counter surface. doubled edge thickness. Colour- Fresh Concrete- 4001. sheets 56" x 120"	Servery pass thru counter and dining room millwork counter.
PLASTIC LA PL1	MINATE Nevamar Laminate	Colour- Spa White S7040T Flat panel door and Drawer fronts and gable ends on cabinet.	Dining room millwork cupboards.
HARDWARE H1	Richelieu Hardware	Millwork D pulls- 95100-171 Stainless finish. 100mm on center. 4 1/4" x 1 9/16".	Dining room millwork cupboards and drawers.

CODE	MANUFACTURE	PRODUCT DISCRIPTION	LOCATION
WALL PROT	TECTION		
WP1	Acrovyn	Wall Protection- Acrovyn solid colour- 305 Mushroom. In Pebblette textured finish. Rail road sheets in Dining area halls and bathrooms. Panels to run vertical in Servery and Pantry	Where noted on plans.
WP2	Acrovyn	Corner guards- Acrovyn SM series, SM-20N square profile #305 Mushroom with top caps. 3" returns, to 48" high from base to top. On outside corners.	Dining, Vestibule, Lobby.
WP3	Acrovyn	Handrail- Acrovyn HRBW-20N, #305 Mushrooms, wood handrail portion in 375 Autumn Maple. 5-5/8" high by 3-1/2" off wall. with end returns to wall finish.	Lobby and connecting corridor.
WP4	Acrovyn	Wall Crash Rail- Acrovyn SCR-50N, surface mounted. 5" high x 1 1/16" projection. 20' lenghts.	Where noted on plans.
WP5	Acrovyn	Door Protection- Acrovyn Solid colour -#305 Mushroom .040". In Pebblette Testure finish. Mounted direct to door surface. from bottom of door to underside of door handle.	Bathroom, Storage, Closets, Kitchen doors.
PAINTS P1	Benjamin Moore	Prepare draw down for approval prior to site work. OC-130 Cloud white, Eggshell finish.	ceilings and bulkheads
P2	Benjamin Moore	OC-131 White Down, Eggshell finish.	general wall colour
P3	Benjamin Moore Benjamin Moore	HC-116 Guilford Green, Eggshell finish Light green HC-25 Ouincy Tan Satin Einish	accent wall colour as noted.
WD1	Fir wood	Fir paneling- vertical boards 6" wide, smooth finished boards fitted tight together. Natural clear finish coat to seal wood.	Dining and lobby area as noted
WOOD CEIL	<u>ING</u>		
WD2	Fir plywood	Fir plywood panels 660mm x 2440mm, with 1" round cutout pattern. Panels fitted tight together in pattern as indicated on Arch dwg. panels installed on flat and sloped surface. Natural clear finish coat Black accoustic material behind sheets.	Dining room ceiling. to seal wood.
ROLLER SH	IADES		
RS1	Sheerweave	Aluminum head rail box mounted into window boxes. Cloth- Sheerweave 2500- 3% open. In Beige/Pearl grey colour. Hold down clips for blinds on doors.	Exterior windows in dining and vestibule area.

DGBK ARCHITECTS

THE FOLLOWING ADDENDUM SUPERCEDES INFORMATION CONTAINED IN DRAWINGS AND SPECIFICATIONS ISSUED FOR THE PROJECT TO THE EXTENT REFERENCED. THIS ADDENDUM FORMS PART OF THE TENDER DOCUMENTS AND IS SUBJECT TO ALL OF THE CONDITIONS SET OUT IN THE CONTRACT CONDITIONS.

E000 - LEGEND & SYMBOL SCHEDULE, AND DRAWING LIST

.1 Revise symbol schedules under Security: remove "ROUGH-IN ONLY" notation for all Security symbols.

REFER TO ESK-1.

END OF ELECTRICAL ADDENDUM NO. 02



consultant

SECURITY SYMBOLS

3975 18th Avenue Prince George, B.C., V2N 1B2 Phone 250-564-4304 Fax 250-564-9323 E-mail mail@geonorth.ca

May 17, 2018

Mr. Paul Rudecki, P.Eng. Northern Health Authority 300 - 299 Victoria Street Prince George BC V2L 5B8 File No. K-4842

Dear Mr. Rudecki:

Re: Preliminary Geotechnical Report, Proposed Cafeteria Addition Pines Seniors Centre, 800 Centre Street, Burns Lake, B.C.

1.0 Introduction

Northern Health (NH) plans to construct an addition on the northeast side of the Pines Seniors Centre at the address noted above. The proposed addition will be offset from the main building by about 3.3 m and connected by a walkway. A new paved driveway and parking area, paved pathways and concrete aprons in front of the doorways are also planned for the project. NH commissioned GeoNorth Engineering Ltd. to provide preliminary geotechnical recommendations for site preparation and foundation design and construction. You authorized us to proceed with the work in NH Contract Number CI182558, based on the scope of work outlined in our proposal dated March 9, 2018 to L&M Engineering Limited (L&M), civil engineering design consultants for the project.

Foundation plans dated April 2018 by DGBK Architects, show the proposed addition will be a single-story structure with a footprint measuring about 17.5 by 24.9 m (57 by 82 ft) supported on spread footings, and will have a grade supported concrete floor slab. The walkway between the main building and addition will also be supported on spread footings. A plan showing the site location and layout of the proposed addition is on Drawing 4842-A1, attached.

Structural drawings dated May 1991, show the existing building has below-grade crawl spaces and a basement and is supported on spread footing foundations. The footing are about 2.4 m below grade opposite the southeast corner to about midway along the south wall of the proposed addition, and extends to about 4.2 m below grade near the southwest corner of the proposed addition.

This report provides preliminary geotechnical recommendations for site preparation, and design and construction of the foundations for the proposed addition. Site conditions will be reviewed and recommendations to address conditions will be provided during construction.

2.0 <u>Background Information</u>

To obtain background information for the site we reviewed surficial geological maps, low resolution aerial photographs and images available on Google Earth, and the results of several previous investigations for nearby buildings.

Geological Survey of Canada Open File 3184¹ identifies the proposed building site as being covered by a veneer of glacial till deposited over bedrock. Veneer deposits are defined as being relatively thin, less than 3 m thick. Glacial till typically consists of a heterogenous mixture of sand to boulder size particles in a silt and clay matrix deposited from and below glacial ice.

Drill holes for a geotechnical investigation in 2010 for the Lakes District Hospital about 150 m southwest of the site, encountered topsoil or asphalt and a thin layer of fill at the surface, over dense gravel and silt with varying amounts of sand and clay, interpreted to be a glacial till deposit. One of the deeper drill holes encountered weak siltstone bedrock at 11.5 m depth to 14.9 m depth, over a medium strong conglomerate. Test pits for an investigation in 2017 for a new building at Centre Street and Sus Avenue about 100 m north of the site, encountered similar conditions. The sand, gravel, silt and clay content of the till deposit is variable with depth and hole location, and the deposit has occasional to frequent cobbles and boulders. During the investigations, we estimated the cobbles and boulders ranged in size from 100 to 900 mm in diameter. Light seepage was observed below 2.5 m depth in the drill holes for the 2010 investigation. No seepage or bedrock was encountered in the test pits for the 2017 investigation.

Aerial photographs dated prior to 1994 show the site is undeveloped, flat and mostly covered in grass. Photos dated between 1994 and 2018 show the existing facility on the site.

3.0 Discussion and Recommendations

The natural, dense gravel and silt till will provide good foundation support for the proposed addition. The gravel and silt is likely a basal till, deposited below and overridden by advancing glacial ice. This type of deposit typically has properties of high shear strength, low compressibility and low permeability, and is susceptible to the development of ice lenses if it is

¹Plouffe, A. 1996. Surficial Geology, Burns Lake, British Columbia (93K/SE); Geological Survey of Canada, Open File 3184, scale 1:100,000.

allowed to freeze. Ice lenses can cause frost heave below concrete footings and slabs. We expect excavation conditions to be difficult due to the hard ground conditions and presence of large diameter boulders in the natural till. Over-excavation might be required to create a flat working surface in the bottom of footing excavations.

Existing fill is not suitable for support of the proposed addition foundations. The depth and extent of fill across the site is unknown. Existing fill with unknown composition and compaction characteristics will likely be associated with the existing building foundations.

The following recommendations are based on the necessary assumption that soil conditions encountered in previous investigations on nearby properties are representative of soil conditions at the site. Please contact our office to review conditions at the time of construction to verify the following recommendations.

3.1 Spread Footing Foundations

We recommend the footings for the proposed addition be supported on the undisturbed, natural gravel and silt till or on compacted structural fill or lean mix concrete placed on the undisturbed natural soil. Design spread footings placed on the natural gravel and silt till, or on compacted structural fill or lean mix concrete placed on the natural soil using a factored bearing resistance of 450 kPa (limit states design) and an allowable bearing pressure of 300 kPa (working stress design).

Use a minimum footing width of 450 mm for strip footings and 600 mm for square pad footings. Provide at least 300 mm of cover over heated, interior footings for confinement, measured from the top of the slab to the base of the footing, and at least 1.2 m of cover over heated perimeter footings to protect against frost heave. Locate proposed foundations adjacent to the existing building at the same elevation as the existing foundations as is proposed for the walkway foundations.

We recommend that unheated footings, such as for canopies, or unheated areas of the building, be protected against frost heave by providing 2.4 m of soil cover. Alternatives to using soil cover for frost protection are to place non-frost-susceptible structural fill below the footings to 2.4 m depth below finished grade, or to protect the bearings soil from freezing using rigid board insulation. A typical detail for using rigid board insulation for frost protection of an isolated footing is on Drawing 4842-D1, attached.

Place vertical insulation, if it is used, against the outside face of the foundation wall to allow building heat to warm the foundations. If it is placed against the inside face, do not extend vertical insulation more than 600 mm below the slab elevation, or provide additional frost

protection as though the footing is unheated. Similarly, do not use horizontal insulation below the slab, or provide sufficient frost protection as if the footing was unheated.

Use slopes no steeper than 2 horizontal to 1 vertical (2H:1V) between footings at different elevations, unless site specific analysis indicates that steeper angles are appropriate. Step strip footings that cross areas of different elevations using a maximum vertical rise of 600 mm between horizontal steps. Construct the steps at an overall slope no steeper than 2H:1V. If buried utilities are installed parallel to building foundations, place the footings or the utility so that the utility is above a line drawn down at a slope of 2H:1V from the edge of the footing.

To prepare foundation areas, remove all existing fill and all organic, softened, wet and disturbed soil to expose the natural gravel and silt till. If required, bring foundation areas to grade using clean, granular fill that meets the gradation specifications for Select Granular Subbase (SGSB), defined in Table 1 below. Place the fill out beyond the edges of the footings a horizontal distance equal to the depth of fill below the footings to allow for a 1H:1V load distribution through the compacted structural fill. Place the fill in thin, uniform layers, and compact each layer to at least 100% Standard Proctor Density (SPD) (ASTM D698). Layer thickness will depend on several factors, including size and weight of compactor, and the moisture content and temperature of the soil, but do not exceed a layer thickness of 300 mm. Alternatives to using compacted granular fill are to either bring the footing accordingly. If using lean concrete it can be formed or cast neat to the soil. Construct the lean concrete so that is at least 150 mm wider than the footing. It can be formed with vertical sides. Keep foundation areas dry prior to placing fill or pouring concrete.

3.2 Grade-Supported Floor Slabs and Concrete Aprons

Prepare grade-supported floor slab areas using the following procedures to reduce the potential for cracking from settlement:

- Remove organic material, existing fill and disturbed soil from below the building area and to at least 300 mm below the underside of the slab.
- Bring slab areas to grade using compacted granular fill that meets our specification for SGSB.
- Place the fill in layers no thicker than 300 mm and compact each layer to at least 100% SPD.
- Directly below the slab, place a minimum 100 mm thick layer of WGB, as defined in Table 1 below, and compact to at least 100% SPD.

Northern Health Authority	May 17, 2018
Preliminary Geotechnical Report, Proposed Cafeteria Addition	
Pines Seniors Centre, 800 Centre Street, Burns Lake, B.C.	File No. K-4842

Where concrete aprons will be located at entrances, and must be prevented from lifting to avoid jamming doorways, we recommend placing a minimum of 100 mm of WGB, over 500 mm of SGSB, over 50 mm thick rigid board insulation, such as Styrofoam HI40 or equivalent, placed on the natural gravel and silt till. Extend the insulation at least 1.8 m out from the wall and 1.8 m laterally on each side of the doorway. Slope the insulation away from the building.

Use granular fill that meets the following specifications:

Sieve	Percentage Passing		
Size (mm)	Well Graded Base	Select Granular Subbase	
100	-	100	
75	-	95-100	
25	100	-	
19	80-100	35-100	
9.5	50-85	-	
4.75	35-70	15-60	
2.36	25-50	-	
1.18	15-35	-	
0.300	5-20	3-15	
0.075	0-5	0-5	

Table 1 - Specified Gradation for Granular Fill

For WGB use crushed and screened material that meets the above noted gradation. The Select Granular Subbase can be a pit run material that meets the above gradation. Use durable aggregate that will not degrade from exposure to water, freeze-thaw cycles or handling, spreading or compacting. It must not contain organic materials or an excess of flat or elongate stones. Do not place fill that is frozen and do not place fill on frozen ground.

3.3 <u>Perimeter Drains</u>

We understand that there are no crawl spaces, basements or mechanical equipment or ducts installed below the level of the surrounding grade, and therefore recommend against installing a perimeter foundation drainage system for the addition. Foundation excavations adjacent to the existing building will likely encounter a perimeter drainage system around the outside edge of the existing foundations. We recommend the existing perimeter drains be maintained, and that an experienced geotechnical engineer review conditions at the time of construction to provide recommendations as required.

4.0 <u>Construction Review</u>

We recommend, and the B.C. Building Code specifies, that an experienced engineer or his designate carry out the following:

- Review all foundation excavations prior to placing compacted structural fill, formwork or concrete to confirm that the exposed soil conditions are as expected and to provide additional recommendations if conditions are different.
- Review the placement and compaction of all structural fill, starting with the first layer to confirm the materials being used meet the project specifications and that they are being compacted to the specified density.

Prior to us being able to complete Schedule C-B of the Code, which is a form titled "Assurance of Professional Field Review and Compliance", we will need to carry out the necessary field reviews. The Schedule C-B form is often required by Building Inspection Officials prior to an Occupancy Permit being issued.

5.0 <u>Closure</u>

This report was prepared by GeoNorth Engineering Ltd. for the use of the Northern Health and their consultants. The material in it reflects GeoNorth Engineering's judgement in light of the information available to us at the time of preparation. Any use which Third Parties make of this report, or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. GeoNorth Engineering Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

May 17, 2018

File No. K-4842

Please contact us if any part of this report needs to be clarified of if you need additional information.

Yours truly, GeoNorth Engineering Ltd.

Per: Josh Hurrell, EIT

Reviewed by, GeoNorth Engineering Ltd. ONGATE 14614 RITISH Per: D.J. MeB M.Eng., P.Eng.

Enclosures:

Site Plan Showing Site Location and Addition Layout, Drawing4842-A1 Typical Insulation Foundation Detail, Drawing 4842-D1



D ON DIGITAL INFORMATION PROVIDED BY IG LIMITED. SED ON DIGITAL INFORMATION TAKEN FROM 2018 Google, Image©2018 DigitalGlobe. Scale - 1:500 0 5 10 15	KEY MAP 04 Scale - 1:50,000	STE-LOCATION
SCALE: 1:500 APPROVED: DATE: 2018/05/17 DWN BY: LU MAP REF: -	NORTHERN HEALTH AUTHORITY PROPOSED CAFETERIA ADDITION PINES SENIORS CENTRE 800 CENTRE STREET BURNS LAKE B.C	GEONORTH ENGINEERING LTD. 3975 18th Avenue
DWG NO. REV. PROJECT NO: 4842-A1 - K-4842	SITE PLAN SHOWING PROPOSED ADDITION	Prince George, B.C. V2N 1B2 Tel. 250-564-4304 Fax 250-564-9323

